



Colswe-Temperature Module User Manual

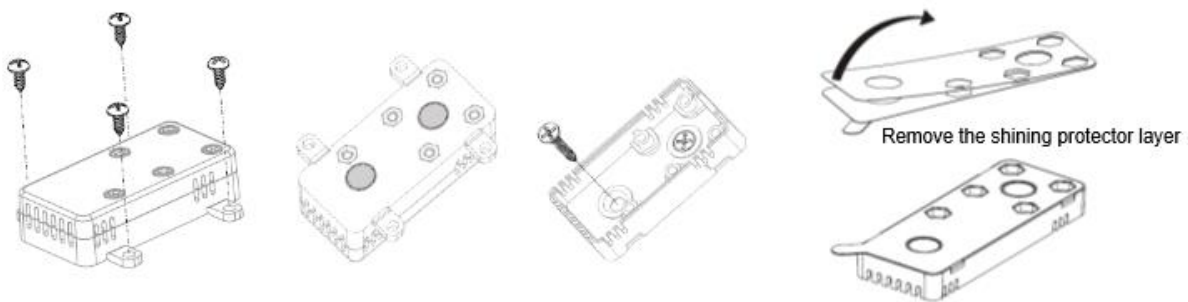
www.colswe.com

1. Introduction

Colswe-Temperature manual offers a quick step-by-step start-up of the operation of the Colswe-Temperature module. Technical information can be found in the Specification Sheet of this product www.colswe.com.

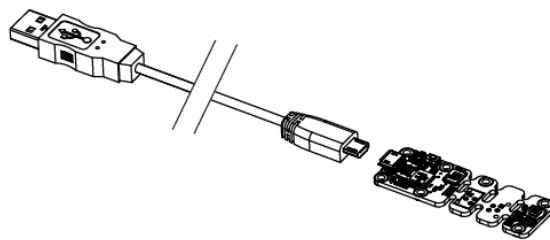
2. Standard mounting

- The enclosure is equipped with 4 fixing clamps for 3 mm screws. The clamps can be removed (broken off).
- The enclosure is also equipped with 2 strong magnets. The magnets can be removed.
- At the place of the magnets the enclosure can be fixed from the inside by 2 countersunk screws.
- The enclosure can also be fixed to a surface with double sided adhesive tape (included)



3. Positioning (see below “Connection”)

- During the measuring/logging process only 5V DC power is needed.
- Colswe-Temperature can be mounted horizontally onto a regular 230 V power socket with the included power USB charger/adaptor and a USB-A to USB micro-B plug adapter (not included).
- For best measuring results the enclosure should be placed vertically or horizontally against any surface that is of neutral temperature. Heated or cooled surfaces can influence the readings.
- For the most convenient positioning, angled USB cables can be chosen,



You must plug in your Colswe-Temperaturemodule with a USB-A to USB micro B cable

4. Connection (measuring/logging)

- During the basic measuring/logging process only 5V DC power is needed.
- Colswe-Temperature can be powered by a 5V AC/DC power adapter with USB outlet (included) and a USB cable and with micro-B connector (included).

- c. Colswe-Temperature can be mounted horizontally too, onto a regular 230 V power socket with the included power USB charger/adaptor and a USB-A to USB micro-B plug adapter (not included).
- d. Care should be given to the USB micro-B connector; it is delicately soldered onto the PCB and should be handled with care.

5. Connection (Testing; sensor management; data retrieval)

For testing purposes, sensor management and data retrieval, Colswe-Temperature should be connected to a PC using the included USB-A USB micro-B cable or the included plug adapter which can also be used for powering Colswe-Temperature.

6. Preparation – Access to Colswe-Temperature

- a. The only way to communicate with Colswe-Temperature is with an installed software.
- b. To start with, the VirtualHub.zip file is to be retrieved from the Colswe website to enable a communication of Colswe-Temperature through an IP network.

Choice between several versions: Windows, Linux, Mac-OS-X and Qnap.

- c. After unzipping the file, apply/install the VirtualHub.
- d. Open your web browser and link to <http://127.0.0.1:4444>
- e. The link gives access to a **Device List**, which shows the VirtualHub and all the devices connected to the PC. The unique serial (ID) numbers of the VirtualHub and the devices are shown.
- f. Congratulations, you are now able to communicate with your Colswe-Temperature.

A pop-up menu shows a list of all Colswe devices connected to your host. For further information about each one of these devices just click on the serial numbers. To configure click on the corresponding “**configure**” button. Each **beacon** button will toggle the blue beacon LED light on the corresponding device allowing you to locate it.

Serial	Logical Name	Description	Action
VIRTHUB0-34714531bb	Colswe	VirtualHub	<button>configure</button> <button>view log file</button>
network	Colswe		
TMPSENS1-A92BC	Colswe-Temperature	Yocto-Temperature	<button>configure</button> <button>view log file</button> <button>beacon</button>
dataLogger		OFF	
temperature		22.31	
YVOCMK02-AA4E9	Colswe-VOC-V2	Yocto-VOC-V2	<button>configure</button> <button>view log file</button> <button>beacon</button>
dataLogger		OFF	
voc		450	
YC02MK01-AA563	Colswe-CO2	Yocto-CO2	<button>configure</button> <button>view log file</button> <button>beacon</button>
carbonDioxide		896	
dataLogger		OFF	

Device list as displayed in your web browser

- g. An initial glimpse of the current measured values can be obtained by left clicking the button in the lower right-hand corner “**show device functions**” and the pop-up menu below appears

Device list

Here is the list of all devices connected to your host. If you want more information about each of these devices just click on serial number. If you want to configure one device, just click on the matching **configure** button. Each **beacon** button will toggle the blue beacon led on matching device allowing you to locate it.

Serial	Logical Name	Description	Action
VIRTHUB0-34714531bb	Colswe	VirtualHub	configure view log file
network	Colswe		
TMPSENS1-A92BC	Colswe-Temperature	Yocto-Temperature	configure view log file beacon
dataLogger		OFF	
temperature		22.38	
YVOCMK02-AA4E9	Colswe-VOC-V2	Yocto-VOC-V2	configure view log file beacon
dataLogger		OFF	
voc		455	
YCO2MK01-AA563	Colswe-CO2	Yocto-CO2	configure view log file beacon
carbonDioxide		910	
dataLogger		OFF	

- h. The device functions can be hidden again by left clicking the button in the lower right- hand corner “**Hide device functions**”.

7. Configuration of Colswe-Temperature Module

- a. Colswe-Temperature can be accessed and configured by left clicking the button “**configure**” on the line of the corresponding device.
- b. The properties of the device are shown.

TMPSENS1-A92BC

Edit parameters for device TMPSENS1-A92BC, and click on the **Save** button.

Serial #

TMPSENS1-A92BC

Product name:

Yocto-Temperature

Firmware:

28721

[upgrade](#)

Logical name:

Colswe-Temperature

Luminosity:

(signal leds only)

Device functions

Each function of the device has a physical name and a logical name. You can change the logical name using the **rename** button.

TMPSENS1-A92BC.temperature /

[rename](#)

Units :

'C

TMPSENS1-A92BC.dataLogger /

[rename](#)

recording is OFF

[configure](#)

no recorded data

Save

Cancel

Properties of the Colswe-Temperaturemodule

- c. First of all the firmware of the sensor has to be upgraded. This can be done by left clicking the button “**upgrade**”.

A pop-down menu appears. It is recommended to choose: “*Use most recent firmware from www.yoctopuce.com*”. Click on “**Upload**” and the upgrade process starts; the LED light in Colswe-Temperature blinks brightly briefly. A successful upgrade is confirmed; please close the menu.

- d. Click again on “**configure**” in the Device List.
- e. Colswe-Temperature can be given a unique Logical name, which can simply be a unique device name by the client. This name can have a maximum length of 19 characters. Authorized characters are A..Z, a..z, 0..9, _, and -.

NOTE: No same name for different devices.

- f. The signal LED light of Colswe-Temperature can be set at a low or high luminosity by a slider. When the sensor is positioned in a working or a public place, it is recommended to set the luminosity at “low” (slider to the left).
- g. Units of temperature and humidity can be set:
- The temperature can be set at °C, °F (or °K)
 - The humidity can be set at % RH (relative humidity)
 - The humidity can be set at g/m³ (absolute humidity)

8. Configuration of the datalogger

Read below about the different alternatives to activate or deactivate the datalogger.

- h. In the device List, click on the “**configure**” button of the device you want to activate. The pop-up menu below appears, follow the instructions to this alternative.

The screenshot shows a configuration window titled "TMPSENS1-A92BC". The window contains the following elements:

- Header: "Edit parameters for device TMPSENS1-A92BC, and click on the **Save** button."
- Fields: Serial # (TMPSENS1-A92BC), Product name (Yocto-Temperature), Firmware (28721), Logical name (Colswe-Temperature), and Luminosity (a slider control).
- Buttons: "upgrade" (next to Firmware), "rename" (next to Logical name), "rename" (next to Units), "configure" (next to data logger status), "Save", and "Cancel".
- Section: "Device functions" with a description: "Each function of the device has a physical name and a logical name. You can change the logical name using the **rename** button."
- Functions: "TMPSENS1-A92BC.temperature / Units: °C" and "TMPSENS1-A92BC.dataLogger / recording is OFF no recorded data".

Red arrows and text provide instructions:

- An arrow points to the "configure" button with the text: "Click the configuration button".
- Another arrow points to the "Save" button with the text: "In the new window select how to start logging, close the window and Click the **Save** button".

- i. After clicking on the **“Save”** button a new pop-up menu below appears

Data logger configuration

You can choose which functions you want to record, and the frequency at which data should be recorded. Note that if you choose a recording rate higher than the effective sensor refresh rate, the same value will be recorded multiple time.

Global settings

Recording: ☐ On ☒ Off

Recording rate: 12/m

☐ Auto-start recording at power-on

☒ Link recording to beacon button

Recordable functions

☒ humidity

☒ pressure

☒ temperature

Ok Close

Manual start, click the **On** button

Auto-start when connecting the sensor to the PC or to the power supply.

Manual start with the beacon button

After the selection
Click the **Ok** button

- j. The alternative with the beacon button is applicable if the beacon button has been activated.

Serial	Logical Name	Description	Action
VIRTHUB0-34714531bb	Colswe	VirtualHub	<input type="button" value="configure"/> <input type="button" value="view log file"/>
TMPSENS1-A928C	Colswe-Temperature	Yocto-Temperature	<input type="button" value="configure"/> <input type="button" value="view log file"/> <input checked="" type="button" value="beacon"/>
YCO2MK01-AA563	Colswe-CO2	Yocto-CO2	<input type="button" value="configure"/> <input type="button" value="view log file"/> <input type="button" value="beacon"/>
YVOCMK02-AA4E9	Colswe-VOC-V2	Yocto-VOC-V2	<input type="button" value="configure"/> <input type="button" value="view log file"/> <input type="button" value="beacon"/>

Click on the beacon button to start logging if that was the selected option

The blue square indicates the sensor is logging

Show device functions

- k. For the following alternative, In the Device List, click on the serial number of the device to be activated. A window appears, click on **“Open API browser (Popup)”**. Follow the instructions below.

Kernel

Serial # TMPSENS1-A92BC
Product name: Yocto-Temperature
Logical name: Colswe-Temperature
Firmware: 28721
Consumption: 22 mA
Beacon: Active (turn off)
Luminosity: 50%

Sensors

Current temperature 22.31 °C
Min temperature 22.25 °C
Max temperature 22.56 °C

Misc

Open API browser (pop-up)
Get user manual from yoctopuce.com

Close

The second alternative to start logging is to click on the device in the device list.

In the new window click the Turn on button to activate the beacon button

The third alternative is to click on Open API browser (pop-up), scroll the API browser to get to datalogger where it's possible to select between the following alternatives:

- Clicking on the ON button
- Autostart
- Activating the beacon button

dataLogger refresh

logicalName: Colswe-Temperature (edit)
advertisedValue: OFF (edit)
currentRunIndex: 0 (edit)
timeUTC: 1522614680 (edit)
recording: OFF (edit)
autoStart: OFF (edit)
beaconDriven: OFF (edit)
clearHistory: FALSE (edit)